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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,808	01/05/2004	Christopher D. Finan	4450-0421P	1621
2292	7590	07/26/2005	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			PHAN, HANH	
PO BOX 747			ART UNIT	
FALLS CHURCH, VA 22040-0747			PAPER NUMBER	
			2638	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/750,808

Applicant(s)

FINAN ET AL.

Examiner

Hanh Phan

Art Unit

2638

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-23 and 25-38 is/are rejected.
- 7) ☒ Claim(s) 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 02/08/2005.

Claim Objections

2. Claims 37 and 38 are objected to because of the following informalities: claim 37 depends on claim 2 which is cancelled, and claim 38 depends on claim 13 which is cancelled. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 27-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

-Claim 27 recites the limitation "**the redundant signal paths**" in lines 8 and 9.

There is insufficient antecedent basis for this limitation in the claim.

-Claim 27 recites the limitation "**the multiplexing unit**" in line 9. There is insufficient antecedent basis for this limitation in the claim.

-Claim 33 recites the limitation "**the multiplexer device**" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 20, 21, 26, 27 and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Mueller (US Patent No. 6,198,721).

Regarding claims 20 and 27, referring to Figures 2-5, Mueller discloses a configuration for an optical fiber ring network, comprising:

two or more nodes (i.e., nodes A, B, C and D, Fig. 3), each node including a multiplexing device (i.e., wavelength division multiplex equipment WDME, Fig. 3);

a client device (i.e., tributary signals TRIB, Fig. 3);

redundant signal connections (i.e., connector modules P1 and P3 and multiplex section protection MSP, Fig. 3) between the multiplexing device (i.e., WDME, Fig. 3) and the client device (i.e., TRIB, Fig. 3); and

redundant signal paths (i.e., protection path and connector modules P1 and P3, see Fig. 3) connecting the nodes (i.e., nodes A and B, Fig. 3), each of the redundant signal paths (i.e., protection path, Fig. 3) including an optical fiber link operable to transmit data bi-directionally between each pair of connected nodes (i.e., nodes A and B, Fig. 3),

wherein the multiplexing device (i.e., WDME, Fig. 3) is configured to selectively transmit outgoing data from the client device (i.e., TRIB, Fig. 3), and selectively receive incoming data destined for the client device, over each of the redundant signal paths, the multiplexing device being selectively linked to the client device for data communications by each of the redundant signal connections (see from col. 3, line 16 to col. 5, line 24).

Regarding claim 21, Mueller further teaches the redundant signal connections includes a primary connection (i.e., connection module W, Fig. 3) and a backup connection (i.e., connection module P, Fig. 3) each being operable to convey the incoming and outgoing data between the multiplexing device (i.e., WDME, Fig. 3) and the client device (i.e., TRIB, Fig. 3), the backup connection (i.e., connection module P, Fig. 3) enabling the incoming and outgoing data to be routed around a link failure occurring in the primary connection.

Regarding claims 26 and 36, Mueller further teaches the multiplexing device includes a coarse optical wavelength multiplexer and demultiplexer operable to transmit a first data stream over the optical fiber cable using a first optical wavelength and to receive a second data stream over the optical fiber cable using a second optical wavelength (see Fig. 5).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 22, 23, 25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller (US Patent No. 6,198,721) in view of Latif et al (US Patent No. 6,400,730).

Regarding claims 22 and 28, Mueller differs from claims 22 and 28 in that he fails to teach first and second link cards, each operable to communicate data between the multiplexing device and the client device and a switching apparatus operable to activate one of the first and second link cards, wherein the activated link card conveys the outgoing data from the client device to the multiplexing device, and conveys the incoming data from the multiplexing device to the client device. However, Latif in US Patent No. 6,400,730 teaches first and second link cards, each operable to communicate data between the multiplexing device and the client device and a switching apparatus operable to activate one of the first and second link cards, wherein the activated link card conveys the outgoing data from the client device to the multiplexing device, and conveys the incoming data from the multiplexing device to the client device (see Figures 15 and 16, col. 17, lines 34-67 and col. 18, lines 1-42). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the first and second link cards, each operable to

communicate data between the multiplexing device and the client device and a switching apparatus operable to activate one of the first and second link cards, wherein the activated link card conveys the outgoing data from the client device to the multiplexing device, and conveys the incoming data from the multiplexing device to the client device as taught by Latif in the system of Mueller. One of ordinary skill in the art would have been motivated to do this since Latif suggests in column 17, lines 34-67 and col. 18, lines 1-42 that using such the first and second link cards, each operable to communicate data between the multiplexing device and the client device and a switching apparatus operable to activate one of the first and second link cards, wherein the activated link card conveys the outgoing data from the client device to the multiplexing device, and conveys the incoming data from the multiplexing device to the client device have advantage of allowing transferring the data between storage device interfaces and network interfaces.

Regarding claim 23, the combination of Mueller and Latif teaches the activated link card is a Fiber Channel (FC) link card (see Fig. 16 of Latif).

Regarding claim 25, the combination of Mueller and Latif teaches the first link card is configured to operate according to Fibre Channel (FC) protocol and the second link card is configured to operate according to Ethernet protocol (see Fig. 16 of Latif).

Allowable Subject Matter

9. Claims 24 and 29-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims and overcome the 112 rejection.

Response to Arguments


10. Applicant's arguments with respect to claims 20-38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye, can be reached on (571)272-3078. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.


HANH PHAN
PRIMARY EXAMINER